

# Constructors

Web Development Boot Camp  
Lesson 10.1





# What is programming?

# Programming

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The designing and building of an executable program that will accomplish a specific computing task. Essentially, programming is problem solving.



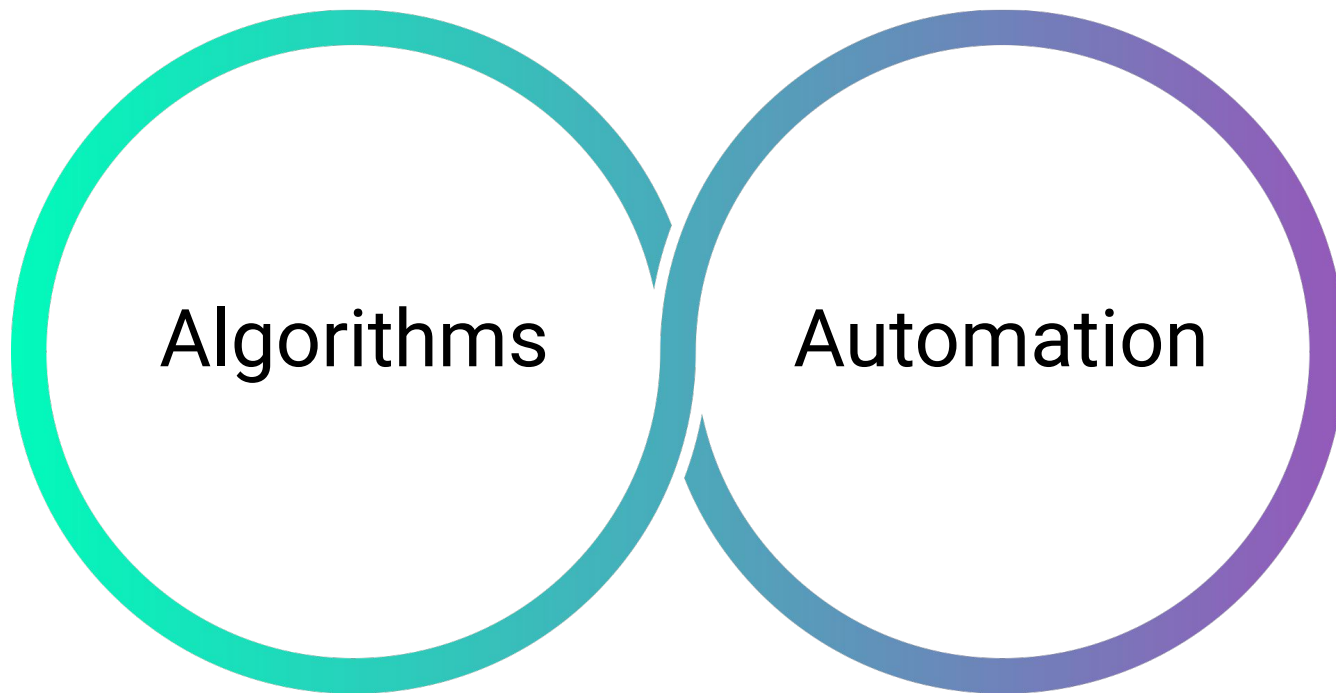


**What problems do we solve?**

# Algorithms and Automation

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Programming allows for us to solve almost any task or problem on a computer.  
There are two primary categories:





**What is DRY?**

# Don't Repeat Yourself!

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Rewriting code wastes time, memory, and can confuse later readers and/or contributors to your code.

D on't  
R epeat  
Y ourself



**What is an object?**



# Objects

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Objects in JavaScript are unordered collections of related data built on a `key:value` structure where values can be any `data-type`, including functions.

```
const person = {  
  name: ['Bob', 'Smith'],  
  age: 32,  
  gender: 'male',  
  interests: ['music', 'skiing'],  
  bio: function() {  
    alert(this.name[0] + ' ' + this.name[1] + ' is ' + this.age + ' years old. He  
likes ' + this.interests[0] + ' and ' + this.interests[1] + '.');  
  },  
  greeting: function() {  
    alert('Hi! I\'m ' + this.name[0] + '.');  
  }  
};
```



**Why/what are objects important  
in JavaScript?**

# Everything is an Object!

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Well, almost everything

## data-types objects:

- Arrays
- Date
- Math
- ...and more!
- Even Functions are objects!

## Primitive types are **not** objects:

- Boolean
- Null
- Undefined
- Number
- String
- Symbol

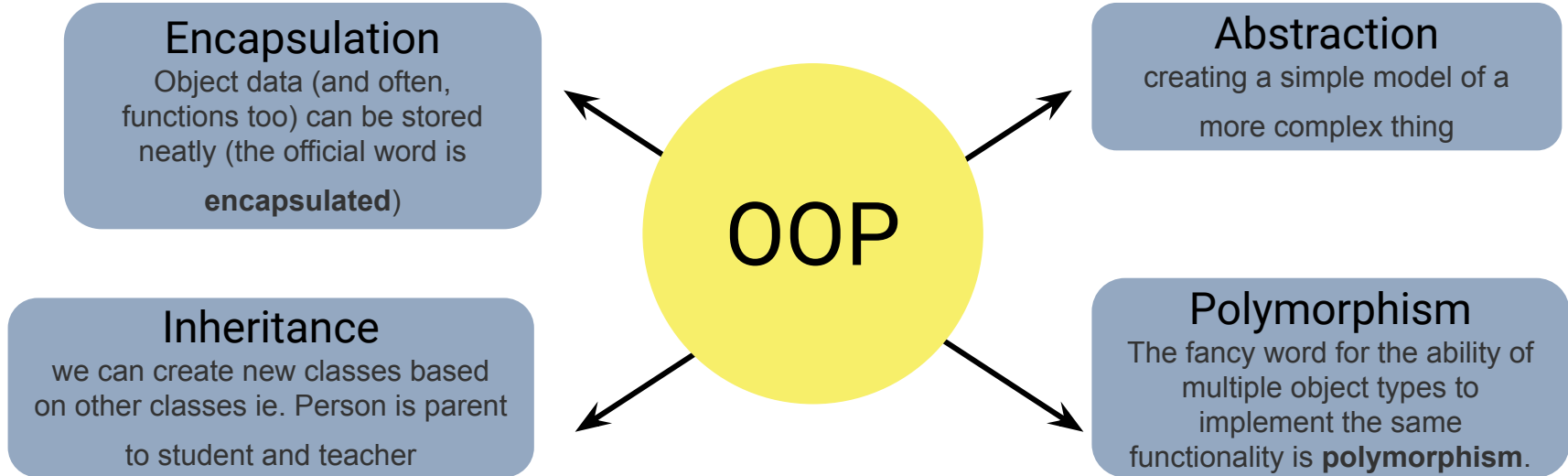


# What is object-oriented programming?

# Object-Oriented Programming (OOP)

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OOP is a programming paradigm or pattern of programming centered around objects. Problems are thought of in a way in which a collection of objects work together to solve a problem. Objects can speak to one another, and this ability makes them suitable for managing and solving large and complex problems.



# <Time to Code>

